

RE 18307-43/04.10

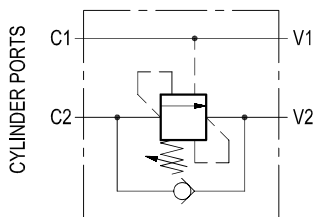
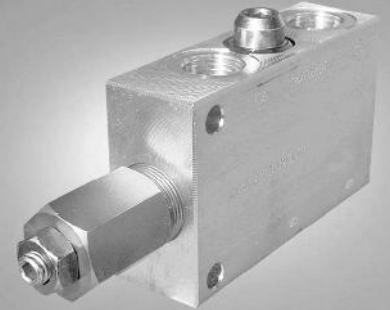
1/2

Replaces: RE 00171/02.07

# Single counterbalance

VBSO-SE

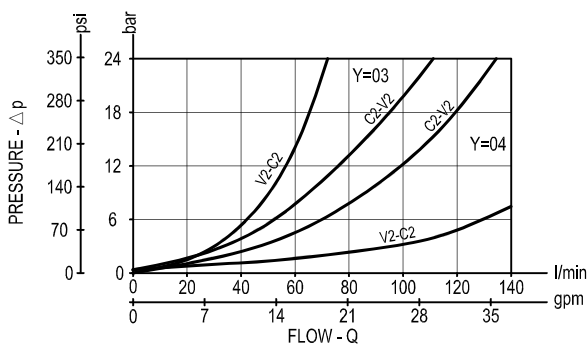
05.41.01 - X - Y - Z



## Description

When pressure at V2 rises above the spring bias pressure, the check valve poppet is pushed away from the seat and flow is allowed from V2 to C2. When load pressure at C2 rises above the pressure setting, the direct operated, differential area, relief function is activated and flow is relieved from C2 to V2. With pilot pressure at V1-C1, the pressure setting is reduced in proportion to the stated ratio of the valve, until opening and allowing flow from C2 to V2. The spring chamber is drained to V2, and any back-pressure at V2 is additive to the pressure setting in all functions.

## Performance



## Technical data

### Hydraulic

Operating pressure	bar (psi)	up to 210 (3000)
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Max. flow: see performance graph
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Relief setting: at least 1.3 times the highest expected load.
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### General

Manifold material	Aluminium
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Note: aluminium bodies are often strong enough for operating pressures exceeding 210 bar (3000 psi), depending from the fatigue life expected in the specific application. If in doubt, consult our Service Network.

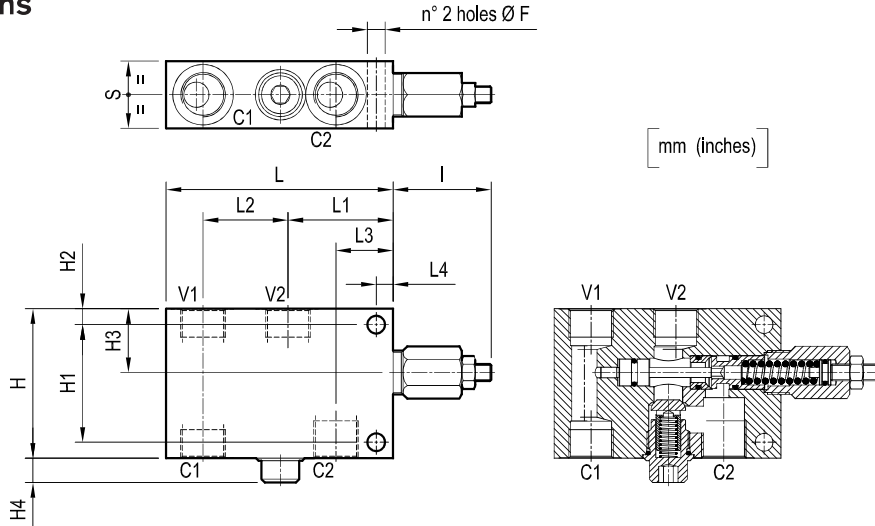
Weight	see "Dimensions"
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Fluid temperature range	°C (°F)	between -30 (-22) and +100 (212)
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Other technical data	see data sheet RE 18350-50
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**Note:** for applications outside these parameters, please consult us.

Dimensions



40 (1.58)	10 (0.39)	34 (1.34)	54.5 (2.15)	62.5 (2.46)	135 (5.32)	58.5 (2.3)	14.5 (0.57)	38 (1.5)	9.5 (0.37)	70 (2.76)	89 (3.5)	10.5 (0.41)	G 3/4	1.42 (3.13)
35 (1.38)	10 (0.39)	32.5 (1.28)	40.5 (1.6)	54.5 (2.15)	113 (4.55)	58.5 (2.3)	14.5 (0.57)	33.5 (1.32)	7.5 (0.3)	54 (2.13)	70 (2.76)	8.5 (0.34)	G 1/2	0.9 (1.98)
S	L4	L3	L2	L1	L	I	H4	H3	H2	H1	H	F	Y	Weight kg (lbs)

Ordering code

<b>05.41.01</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
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Single counterbalance

Pilot ratio

**= 03** 8.2:1

= 10 3.2:1

Port sizes	V1-V2	C1-C2
<b>= 03</b>	G 1/2	G 1/2
= 04	G 3/4	G 3/4

SPRINGS			
	Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting Q=5 (l/min.) bar (psi)
<b>= 20</b>	60-210 (870-3000)	64 (928)	200 (2900)
<b>= 35</b>	100-350 (1450-5000)	106 (1537)	350 (5000)

Type	Material number
054101030320000	R930001654
<b>05410103033500A</b>	<b>R930001655</b>
054101030420000	R930001658
05410103043500A	R930001659
054101100320000	R930000088
05410110033500A	R930001662
054101100420000	R930001663
05410110043500A	R930001664

Type	Material number